

### **Amendments to the Claims:**

The below listing of claims replaces all previous listings and versions of claims in this application:

1. (Currently Amended) A method comprising, with use of a processor:

determining an original digital matrix image to be scaled,

selecting a scaling ratio  $R$  by setting integers  $X$ ,  $Y$ , and  $Z$ , wherein the scaling ratio  $R$  corresponds approximately to an equation  $Y/(Z*X)$  and wherein  $Y < Z$ ,

coarse scaling the original matrix by using a ratio  $1/X$  to create pixels of an intermediate matrix, and

fine scaling the intermediate matrix by using a ratio  $Y/Z$  to create a final matrix image; where

coarse scaling is simpler than fine scaling, and where a value of the ratio  $1/X$  is selected for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.

2. (Previously Presented) A method according to Claim 1, wherein the second scaling is performed, after the first scaling, to the pixel group calculated for the intermediate matrix, without completing the calculation of the entire intermediate matrix.

3. (Previously Presented) A method according to Claim 1, wherein the integer  $X$  is selected to be as great as possible, according to the integers maximums selected for  $Y$  and  $Z$  and the selected scaling ratio  $R$ .

4. (Previously Presented) A method according to Claim 1, wherein the integer  $X$  is selected to be as great as possible as the power of two.

5. (Previously Presented) A method according to Claim 1, wherein  $1/X$  is approximately  $Y/Z$ .

6. (Currently Amended) An apparatus comprising:  
 memory areas configured to store an original digital matrix image to be scaled, for data to be processed, and configured to store an output image matrix, a central unit (CPU) configured to process the original matrix image in two stages by a selected scaling ratio  $R$ , in the first stage the original matrix is coarse scaled by using a ratio  $1/X$  to create pixels of the intermediate matrix, and in the second stage each pixel of the intermediate matrix is fine scaled by using a ratio  $Y/Z$ , and wherein an equation  $Y/(Z \cdot X)$  corresponds approximately to a scaling ratio  $R$  and wherein  $Y < Z$ , and where  
coarse scaling is simpler than fine scaling, and where a value of the ratio  $1/X$  is selected for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.

7. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is integrated in connection with the image sensor of a camera.

8. (Previously Presented) An apparatus according to Claim 7, wherein the apparatus incorporates a host system and the coarse scaler is integrated in connection with the image sensor of a camera and the fine scaler is integrated in the host system.

9. (Previously Presented) An apparatus according to Claim 6, wherein the scaling unit comprises separate processors (CPUs) for the coarse scaling and fine scaling.

10. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus includes a memory for the scaling function of at most 4 image-sensor lines for each color component.

11. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is fitted to a mobile station.

12. (Currently Amended) A computer-readable memory having software stored thereon and the software when executed by a central unit (CPU) performs:  
determining an original digital matrix image to be scaled,

selecting a scaling ratio  $R$  by setting integers  $X$ ,  $Y$ , and  $Z$ , wherein the scaling ratio  $R$  corresponds approximately to an equation  $Y/(Z \cdot X)$  and wherein  $Y < Z$ ,

coarse scaling the original matrix by using a ratio  $1/X$  to create a pixels of an intermediate matrix, and

fine scaling the intermediate matrix by using a ratio  $Y/Z$  to create a final image matrix; where

coarse scaling is simpler than fine scaling, and where a value of the ratio  $1/X$  is selected for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.

13. (New) A method according to Claim 1, wherein the first, coarse scaling is analog.

14. (New) An apparatus according to Claim 6, wherein the first, coarse scaling is analog.

15. (New) A computer-readable memory according to Claim 12, wherein the first, coarse scaling is analog.